

**Notice of Allowability**

Application No.

09/982,788

Examiner

Richard Lee

Applicant(s)

KONDO ET AL.

Art Unit

2613

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response to the restriction requirement filed 10/6/04.
2. ☒ The allowed claim(s) is/are 3,4,27,36 and 37.
3. ☒ The drawings filed on 22 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 1/25/02
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

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1. Applicant's election without traverse of the invention of Group III, claims 3, 4, 27, 36, and 37 in the reply filed on October 6, 2004 is acknowledged.

2. This application is in condition for allowance except for the presence of claims 1, 2, 5-26, 28-35, and 38-47 to inventions non-elected without traverse. Accordingly, claims 1, 2, 5-26, 28-35, and 38-47 have been cancelled.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. **In the Specification:**

At page 31, line 20 of the Specification, "S10" has been changed to --S104--; and

At page 33, line 21 of the Specification, "S201" has been changed to --S202--.

5. **In the Claims:**

Claims 1, 2, 5-26, 28-35, and 38-47 have been canceled;

Claim 3, line 13, after "boundary", --of blocks/motion-compensation-units-- has been inserted;

Claim 3, line 20, after "boundary", --of blocks/motion-compensation-units-- has been inserted;

Claim 27, line 3, "block boundary" has been changed to --boundary of blocks/motion-compensation-units-- and

Claim 37, line 2, after "boundary", --of blocks/motion-compensation-units-- has been inserted.

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6. The following is an Examiner's Statement of Reasons for Allowance:

Claims 3, 4, 27, 36, and 37 are considered allowable over the prior art of record because the prior art of record does not particularly suggest, disclose, or teach a block distortion detection method comprising receiving a decoded image signal, and obtaining a first difference in pixel values between two pixels across the boundary of blocks/motion-compensation-units which is the boundary between adjacent blocks as well as the boundary between adjacent motion compensation units, and a second difference in pixel values between two pixels which belong to a block in the vicinity of the boundary of blocks/motion-compensation-units; and deciding that a block distortion occurs at the boundary of blocks/motion-compensation-units when the absolute value of the first difference is larger than a first threshold value while the absolute value of the second difference is smaller than a second threshold value, and the amount of motion in motion compensation units across the boundary of blocks/motion-compensation-units is larger than a third threshold value, and deciding that a strong block distortion occurs at the boundary of blocks/motion-compensation-units when the first and second threshold values are small, and the amount of motion in motion compensation units across the boundary of blocks/motion-compensation-units is large as claimed in claim 3.

Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably **accompany** the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Honjo discloses a method of correcting an image signal decoded in block units.

Kawasaka discloses a block distortion corrector and image signal expander.

Kryukov et al discloses a removal of block encoding artifacts.

Inoue discloses a video signal encoding apparatus utilizing control of quantization step size for improved picture quality.

Fukuda discloses an image signal decoding device capable of removing block distortion.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Lee whose telephone number is (703) 308-6612. The Examiner can normally be reached on Monday to Friday from 8:00 a.m. to 5:30 p.m, with alternate Fridays off.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group customer service whose telephone number is (703) 306-0377.

  
RICHARD LEE  
PRIMARY EXAMINER

Richard Lee/rl



12/23/04